April 12, 1972

Mr. Jerry L. Pratt
Chief Engineer, Bureau of Gas
Knoxville Utilities Board
626 Gay Street, S.W.
Knoxville, Tennessee 37901

Dear Mr. Pratt:

In response to your letter of February 25, 1972, concerning test pressures for certain distribution pipelines and corrosion control requirements for metallic fittings used on a plastic pipeline, we offer the following:

Question 1: A two-inch steel distribution line installed after November 11, 1970, in a Class Four Location is to be operated at 98 pounds. Is the test pressure for this main 90 psig or does the 1.5 factor apply making the test pressure 147 psig?

Answer: In accordance with Section 192.509, a 90 psig test is all that is required for a line to be operated at 100 psig or less.

Section 192.619 prescribes requirements for the maximum allowable operating pressure of a pipeline and does not determine the test pressure. Section 192.619(a)(2)(ii) has been amended to state, in part, "For steel pipe operated at 100 psig or more, the test pressure is divided by a factor determined in accordance with the following table: ...."

Question 2: In the requirements for corrosion control Section 192.455, all buried pipelines installed after July 31, 1971, must be protected against external corrosion. Does this mean that a type 316 stainless steel component used on a plastic line and insulated from other metal components be required to have cathodic protection applied to it? Also, does this require that steel compression fittings used to join plastic pipe be cathodically protected?

Answer: Section 192.455 requires that all buried metallic pipeline be cathodically protected, unless the pipeline qualifies for the exceptions of paragraphs (b) or (c). As defined in Section 192.3, "pipeline" is defined as "all parts of those physical facilities through which gas moves in transportation, including pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies." Therefore, stainless steel components used on plastic pipe and steel compression fittings used to join plastic pipe must be cathodically protected.

We hope this has answered your questions satisfactorily. If we may be of further assistance, please let us know.

Sincerely,

Joseph C. Caldwell
Acting Director
Office of Pipeline Safety

February 25, 1972

Mr. Joseph C. Caldwell
Acting Director
Office of Pipeline Safety
Department of Transportation
Washington, D.C. 20590

Dear Mr. Caldwell:

We would like interpretation of the regulations relating to the testing of a distribution pipeline to operate below 100 psig. According to Section 192.509, the test required is 90 psig; however, according to the Section 192.619 the operating pressure is determined by dividing the test pressure according to the table concerning class location and installation date.

Question One: A two-inch steel distribution line installed after November 11, 1970, in a Class Four Location is to be operated at 98 pounds. Is the test pressure for this main 90 psig or does the 1.5 factor apply making the test pressure 147 psig?

Question Two: In the requirements for corrosion control Section 192.455, all buried pipelines installed after July 31, 1971, must be protected against external corrosion. Does this mean that a Type 316 stainless steel component used on a plastic line and insulated from other metal components be required to have cathodic protection applied to it? Also, does this require that steel compression fittings used to join plastic pipe be cathodically protected?

Yours truly,

Jerry L. Pratt
Chief Engineer
BUREAU OF GAS

Mr. Jerry L. Pratt
Chief Engineer, Bureau of Gas
Knoxville Utilities Board
626 Gay Street S.W.
P.O. Box 1951
Knoxville, Tennessee 37901

Dear Mr. Pratt:

In response to your letter of February 25, 1972 concerning test pressures for certain distribution pipelines and corrosion control requirements for metallic fittings used on a plastic pipeline we offer the following:

Question One: A two-inch steel distribution line installed after November 11, 1970, in a Class Four Location is to be operated at 98 pounds. Is the test pressure for this main 90 psig or does the 1.5 factor apply making the test pressure 147 psig?

Answer: A 90 psig test is all that is required for a line to be operated at 100 psig or less. In Amendment: 192.3; Docket OPS-3, Miscellaneous Amendments, Section 192.619(a)(2)(ii) was changed to read, "For steel pipe operated at 100 psig or more, the test pressure is divided by a factor determined in accordance with the following table:

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Question Two: In the requirements for corrosion control Section 192.455, all buried pipelines installed after July 31, 1971, must be protected against external corrosion. Does this mean that a type 316 stainless steel component used on a plastic line and insulated from other metal components be required to have cathodic protection applied to it? Also, does this require that steel compression fittings used to join plastic pipe be cathodically protected?

Answer: As now worded Section 192.455 would require all such underground metallic piping to be cathodically protected.

We hope this has answered your questions satisfactorily. If we may be of further assistance, please let us know.

Sincerely,

Mr. Jerry L. Pratt
Chief Engineer, Bureau of Gas
Knoxville Utilities Board
626 Gay Street S.W.
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> Answer: A 90 psig test is all that is required for a line to be operated at 100 psig or less. In Amendment: 192.3; Docket OPS-3, Miscellaneous Amendments, Section 192.619(a)(2)(ii) was changed to read, "For steel pipe operated at 100 psig or more, the test pressure is divided by a factor determined in accordance with the following table:..."
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> Question 2: In the requirements for corrosion control Section 192.455, all buried pipelines installed after July 31, 1971, must be protected against external corrosion. Does this mean that a type 316 stainless steel component used on a plastic line and insulated from other metal components be required to have cathodic protection applied to it? Also, does this require that steel compression fittings used to join plastic pipe be cathodically protected?
>
> Answer: As now worded Section 192.455 requires all such underground metallic piping to be cathodically protected, unless the facilities qualify for the exceptions of paragraphs (b) or (c).

March 29, 1972

MEMORANDUM

SUBJ:Letter replying to Mr. Jerry L. Pratt
(Changes suggested by Buck Furrow TGC-20)

FROM:Paul Cory

TO: Frank Fulton

I disagree strongly with the deletion of the second sentence of the answer to Question 1 in that if Mr. Pratt had not missed the fact that the Miscellaneous Amendments limited the use of the table in Section 192.619(a)(2)(ii) to lines operating at 100psig or more, the question would not have been asked in the first place. This will call his attention to those amendments and avoid future unnecessary questions.

The answer to Question 2 was intentionally begun with "As now worded", because the requirements should include exceptions for the type fittings he described but we did not wish to say we are going to change this, although Lance and I both agree that it should be at first opportunity. Changing the word "the" to "they" makes no sense with the addition of "components and fittings" and the words "of plastic" make no sense at all when talking about cathodic protection unless we get into an exception for metallic fittings used to join plastic pipe or tubing.

P.J.C.

Mr. Jerry L. Pratt
Chief Engineer, Bureau of Gas
Knoxville Utilities Board
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Knoxville, Tennessee 37901

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>
> Answer: In accordance with §192.509, a 90 psig test is all that is required for a line to be operated at 100 psig or less. Section 192.619 prescribes requirements for the maximum allowable operating pressure of a pipeline and does not determine the test pressure.
>
> Question 2: In the requirements for corrosion control Section 192.455, all buried pipelines installed after July 31, 1971, must be protected against external corrosion. Does this mean that a type 316 stainless steel component used on a plastic line and insulated from other metal components be required to have cathodic protection applied to it? Also, does this require that steel compression fittings used to join plastic pipe be cathodically protected?

Answer: Section 192.455 requires all buried metallic pipe to be cathodically protected, unless they qualify for the exceptions of paragraphs (b) or (c).

NOTE: This page is an edited and incomplete copy of the first page of this document.